



PHYSICS AND ASTRONOMY

ARCNet

SPECIAL SEMINAR

Dr. Guillaume Thomas

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“Stellar parameters from broad band photometry with machine learning”

Abstract

With the recent second data release from the Gaia mission, we have access to the proper motion of more than 1 billion of stars up to $G=21$. However, for the most distant objects, their parallax is not enough precise to measure their distance, and their photometry should be use to estimate this parameter. Nonetheless, a degeneracy on the distance measurement with this method exist between dwarfs and giants stars, which depends also of the metallicity of a stars. This degeneracy can be remove using very expensive medium-high resolution spectroscopic observation. During this seminar, I will present how, with a machine learning based method, we can use cheapest broad band.

Friday, October 19, 2018

1:00 p.m.

DSB– Room C116